01010 Summary Of Work These drawings have been prepared from the latest information available on existing conditions. Minor variations may occur in the actual construction.

The Contractor and sub-contractor shall verify all existing conditions and dimensions on the drawings. Notify the Architect of any discrepancies prior to starting or ordering materials. The work of this project is the remodel/addition of one (1) single-family residence, as shown on these

The Structural Calculations prepared by the Structural Engineer, shall be a part of these documents with all recommendations incorporated in the Construction Documents

The Energy Calculations prepared by the Mechanical Engineer shall be a part of these documents and all recommendations and mandatory compliance requirements included as such

These contract documents do not contemplate handling or treatment of asbestos and/or any hazardous waste materials. Should any hazardous materials be discovered, the Contractor shall notify the Owner at

01013 Project General Requirements

The Contractor and sub-contractors work shall be in accordance with all applicable federal, state, and local building codes and agency standards.

All construction shall conform to the latest adopted editions of the 2010 California Building Code (CBC) based on the 2009 International Building Code (IBC), the 2010 California Residential Code (2010 CRC), and the 2010 CALGREEN code and all applicable local, state, and national codes, ordinances and laws. The Architect shall not be held responsible for the means, methods and techniques of construction work, safety in, on, or about the project site, or the Contractors failure to conform to the Construction Documents, codes, regulations, and laws, or for the performance of the Contractor in a timely and

All work shall conform to the latest California State Residential Energy Laws.

Product manufacturer's written recommendations, drawings and specifications are to be followed under all conditions. Any conflict with drawings and specifications above shall be determined by the Architect with no change in contract price.

All construction materials shall be new Provide underfloor ventilation 12"x18" space in each new foundation wall for each 100 square feet of

underfloor space. Provide copper mesh screen frame at each opening. Pending approval of Fire Dept. Provide attic ventilation at eave line to equal not less than 1/150 of

area ventilated. Provide metal mesh screen in wood or metal frame at each opening. All outward swinging doors shall have an exterior landing within I" of the top of the door threshold. Caulk and waterproof under the threshold. Slope landing away from the structure 1/4" per foot.

Prior to the start of any demolition or construction, the Contractor shall inspect and prepare an inventory of all items noted to be relocated or salvaged and verify that these items are in good working condition and able to be relocated. The Contractor shall present this inventory to the Owner and the Architect for their approval. The Contractor shall be held responsible for replacing any relocatable item damaged during the demolition process. Salvaged items shall be the Owner's choosing and shall be the Owner's property.

Coordinate all demolition work with architectural, structural, electrical, mechanical, plumbing and landscaping drawings.

Coordinate inspection and testing with Soils, Structural, Mechanical and Electrical Engineers and with their reports, drawings and specifications.

Soil compacting report shall be provided to the building inspector at the job site prior to placement of concrete for the new foundation if requested by the City.

Refer to structural, mechanical, plumbing and electrical drawings for other General Notes and Requirements and coordinate with architectural drawings.

These Drawings and Specifications imply a COMPLETE building ready and capable of being occupied and used in a normal manner. All light fixtures shall have bulbs. All exterior doors shall have locks. Street numbers and a mailbox shall be installed. All equipment shall function properly. All surfaces shall be inished. All debris shall be removed. All materials and equipment installed shall be new. All work shall be performed to highest standards of quality and craftsmanship.

In case of any difference between Drawings and/or Specifications, discrepancy shall be called to the attention of the Architect and the Architect shall choose which governs. Figured dimensions on drawings shall be determinative over measurements by scale.

All requirements, standards, grades, species and strengths of materials and finishes listed in these specifications are minimums. Should drawings or reports conflict with specifications, the most resistive and superior quality shall apply. The Contractor shall be responsible for the accurate placement of the building on the site. Any existing

structures, which are not located as shown on the plans, shall be brought to the Architect's attention

This structure is designed as a stable unit after all components are in place. The Contractor shall be responsible to provide temporary bracing as required to insure the vertical and lateral stability of the entire structure or a portion thereof during construction.

Provide draft stop in the attic space.

Attic space shall not exceed 3,000 sq. ft. Wood Frame Construction: (minimums, unless noted otherwise)

Bottom plates shall be pressure treated

All bottom plates shall be anchored to the foundation with 5/8" diameter anchor bolts having 7" minimum embedment (or other approved anchors) at a minimum of 12" from plate ends.

See Framing Specifications or Detail Sheets for the following information: Nailing Schedule Ripper Attachment (where applicable)

At concealed spaces of stud walls, and partitions, including furred spaces at the ceiling and floor levels, and at MAX. 10 ft. intervals both vertical and horizontal. At the connections between canceled vertical and horizontal spaces such as soffits, dropped ceilings, and cove ceilings and tops of framed columns. In concealed spaces between stair stringers, at the top and bottom of the run and between studs along and in line with the run of stairs, if the walls under the stairs are unfinished. In openings around vents, pipes, ducts, chimneys, fireplaces, and similar openings, which afford a passage for fire at ceiling and at ceiling and floor levels, use non-combustible materials. At openings between attic spaces and chimney chases for factory-built chimney. Walls having parallel or staggered studs for sound control

shall have fire blocks of mineral fiber or glass fiber or other material. The integrity of all fire blocking, and draft stops, shall be maintained. Maintain 1-hr fire resistive wall and ceiling construction between the garage and residence for occupancy separation. Per CBC section 706 and table 707.3.9

See Architectural Drawings for Energy Requirements.

Pay legally required sales, consumer and use taxes.

Secure and pay for licenses and inspections, as necessary for proper execution and completion of work, which are customarily secured after start of construction and which are applicable at time contract is

The Owner shall pay for all permits and fees required for construction and all tests and inspections as required by Drawings and Specifications.

Give notices required by governmental authorities and by the Owner or his/her representative. The Contractor shall:

Be held responsible for compliance with the California Safety Orders. Contractor shall coordinate all mechanical and electrical equipment as to weights and exact locations with structural supports. In the event that the purchased equipment deviates in weight and location from those indicated on the plans, the Structural Engineer must be notified, and approval obtained prior to installation.

Guarantee all work performed by him directly for the period of one year. Work shall include all materials, fixtures, equipment and labor. Such guarantee shall begin on date of filing of Notice of Final

Install and maintain a phone and fax at the job site for the duration of construction.

Grade the site and slope all grading and concrete work to provide positive drainage away from the building and to area storm drains. Protect the adjacent properties, including, but not limited to pollution, trash, or damages due to

demolition, excavation, construction and/or flooding originating on site. Shall be responsible for the appropriate "hook-up" to all utilities required to support the work.

Flash and caulk as necessary to achieve a waterproof, watertight building.

The Contractor shall coordinate work with all trades and utilities. Shoring shall be provided where demolition of support structures occurs.

Notify the Architect about any condition requiring a modification or change, before proceeding with the

Provide and pay for labor, materials and equipment, tools, construction equipment and machinery, electrical power, water, heat, telephones and other utilities required for construction, and other facilities and services necessary for proper execution and completion of the work.

The Contractor shall investigate, verify and be responsible for all conditions and dimensions of the project and shall notify the Architect of any discrepancies and inconsistencies between drawings, specifications and existing conditions prior to submitting bid.

Verify all dimensions, levels and site conditions prior to the start of construction and report any discrepancies immediately to the Owners representative. Only noted dimensions are to be used for construction purposes. Obtain clarification of dimensions from the Architect when necessary. Do not scale drawings. Errors caused by scaled dimensions shall be corrected by the Contractor at the Contractor's expense.

Notify the Owner's Representative promptly, should any questions arise pertaining to the Construction Documents, or if conditions are found that may prevent the proper execution of any portion of the work. The Contractor shall correct all errors, discrepancies, or omissions which result from his/her failure to notify the Owner's Representative before starting fabrication or instillation of any item of work.

Maintain on the job site, in good order, one copy of all Construction Documents and modifications thereto, field test records and inspection reports, correspondence pertaining to the work on site permits and permit sets of plans for the use of building officials.

Maintain a separate set of drawings on site to be marked up by the Contractor with "as-built" information

Deliver to the Owner, upon project close-out, the permit and record (as-built) sets of Construction Documents together with operation and maintenance data, warranties, certificates of compliance required by regulatory authorities, bonds and such other project records as may be requested by the

Provide minimum five (5) copies of shop drawings and color samples for all fabricated items including all structure, carpentry, finishes, specialties, equipment, furnishings, elevators, mechanical, electrical and plumbing. Submit and pick up from Architect for his approval

Contractor shall be responsible for complete cleanup including removal of stains, putty marks, paint marks and complete scrub, wax and polishing of surfaces to the satisfaction of the Owner and Architect. 01030 Alternates.

Alternates to an item specified herein, must be approved in writing by the Architect or Owner prior to

If the Contractor and/or Subcontractors wish to substitute materials or products other than those specified, he shall obtain the Architect's written approval no later than five (5) working days prior to

The decision of the Architect as to the equality and utility of substitutions offered shall be final.

01070 Abbreviations and Symbols:

Abbreviations and symbols used in the Construction Documents are defined on the sheet where they occur. Any abbreviation or symbol used in the Construction Documents and not defined as stated above shall be verified with the Architect.

Submittals of product data, samples, manufacturer's installation instructions and warranties shall be made by the Contractor to the Architect when required by a Section below or as required by the Owner. DIVISION 2 - SITE WORK

02100 Site Preparation:

01300 Submittals:

In the event that unknown utilities or structures are found during construction at unexposed or exposed locations, the contractor shall stop work in that area and notify the Owner and utility company,

Clear the site of all stumps, roots, debris and other deleterious material to a depth of not less than twelve (12) inches below the ground surface in the area to be occupied by the proposed building(s) or

Protect all surrounding surfaces, vegetation and areas that are to remain from dust and damage during

Before starting any work, Contractor shall verify exact locations of existing sewer, water, gas and

Protection: Care of Building and Grounds: Provide, erect and maintain such temporary work as may be required for the protection of the public and those employed in or about the building, including temporary fences, sidewalks, bridges, guardrails around openings and trenches, barricades, night lights and guard

Be responsible for all property involved in this Contract including materials, equipment, etc., that may be damaged or stolen, and make good all such damage or loss with no expense to Owner.

Adequately protect all trees and shrubs that are apt to be damaged during this operation. The Contractor shall be liable for any damage to the same and shall make replacement satisfactory to the Owner and without charge. Protect all streets, sidewalks, roads, and pavements: repair all damage to the same.

Provide all shoring, bracing and sheeting as required for the safety and proper execution of the work.

02200 Earthwork

electrical lines and shall protect from damage.

All excavation and grading shall comply with OSHA and other governing regulations.

Obtain civil engineering drawings from the Owner or Architect and coordinate work herein with site work performed by all trades to insure the orderly progress of the total work. Obtain the location and depth of utility lines, all underground work shown in the Construction Documents, all facilities in the vicinity of the Project and any other existing work not specifically indicated, and protect such utility lines, facilities and

Excavate for footings neatly to widths and depths indicated and as directed by the soils engineer. Fill over-excavated footing depths with concrete.

Cut trenches for piping and conduits to minimum sufficient widths and depths as shown on site utility drawings by others or as required. Conform to the soils report and to utility company requirements. Backfill trenches as directed by the soils report.

The Contractor shall be responsible for proper drainage away from all buildings and away from the site both during construction and upon completion. Finished grade shall have a minimum slope of 1/4" per foot away from any portion of the foundation for a distance of four feet.

02500 Paying and Surfacing:

Paving and surfacing shall be as shown and specified in the Construction Documents, by code or as

02600 Piped Utilities:

Piped utilities shall be as shown and specified in the documents prepared by the Civil Engineer or as

02710 Sub-Drainage System:

Sub-drainage system shall be as shown and specified in the documents prepared by the Civil Engineer, Landscape Architect, and/or Architect or as required by the Owner.

02720 Storm Drainage System:

Storm drainage system shall be as shown and specified in the documents prepared by the Civil Engineer Landscape Architect, and/or Architect or as required by the Owner. 02900 Landscapina:

Landscaping shall be as shown and specified in the documents prepared by the Landscape Architect or

DIVISION 3 - CONCRETE 03300

Cast In-Place Concrete:

This section applies to slabs on grade and footings or grade beams not exceeding 3 feet in height.

Hold down anchors to be tied in place prior to calling for foundation inspection. Formwork: The Contractor is responsible for formwork design and construction. Construct forms firmly, of sound lumber and plywood, to lines and levels indicated. Erace and fasten to withstand superimposed loads. Remove all form boards as soon as concrete has acquired sufficient strength but not later than

Reinforcement: Provide all reinforcement as required by the soils report and as indicated on the drawings. Footings, grade beams, stem walls and other reinforced concrete shall have minimum depth, width, anchors and reinforcement as required by the soils report and as indicated on the drawings.

Control Joints: Provide as indicated on the drawings and as directed by the Structural Engineer Finish: Steel trowel finish under resilient flooring, wood float elsewhere. Feather to adjacent surfaces a

Curing: Shall be as required to maintain moisture content of slabs on grade. Inert curing compounds may be used as permitted by Owner's representative, provided that the compound used is compatible

03510 Gypsum Concrete:

Supply and install Gypsum concrete floor underlayment as shown on the drawings. Installation shall be by a factory-approved applicator in accordance with the manufacturer's written instructions and the requirements of the referenced evaluation.

03520 Lightweight Insulating Concrete:

Supply and install lightweight insulating concrete as shown on the drawings.

CONCRETE DESIGNS INC. - SPECIFICATIONS SECTION 03450 - ARCHITECTURAL PRECAST CONCRETE - PLANT CAST

<u>Part I - General</u>

SUMMARY

This Section refers to architectural precast concrete units. Architectural precast concrete includes the followina:

Samples - Submit samples of color options and texture options for selection process.

Precast concrete units as defined in the architectural plans. Potentially includes wall caps, columns, balustrade, quoins, pavers, finials, moldings or any other decorative element designed to be cast out of concrete. These are non-structural, self supporting units.

Product data and instructions for manufactured materials and products.

causing delay in the project.

Shop drawings prepared by CDI showing complete information concerning the precast concrete units. Indicate member dimensions and side view. Unless otherwise noted, anchors will be embedded in a standard configuration.

QUALITY ASSURANCE Fabricator Qualifications: CDI has over 50 years of successful experience in fabrication of architectural precast concrete units. Fabricator has sufficient production capacity to produce, transport and deliver required units without

Design modifications will be made only as necessary to meet field conditions and to ensure proper fitting of the work and only as acceptable to the Architect or Project Manager. Maintain general design concept shown without increasing or decreasing sizes of members or altering profiles and alignment shown without architects approval. Modifications may need to be considered in view of budget constraints.

DELIVERY, STORAGE AND HANDLING Deliver precast concrete units to project site in such quantities and at such times to assure continuity of installation. Schedules and priorities will be based on the information provided by the customer. Products to be packaged to protect the finish during transport. Precast may be a long lead time item and should be ordered accordingly.

PART 2 - PRODUCTS

REINFORCING MATERIALS Rebar used in some product designs to insure safe handling Corrugated Wall Ties - Included in moldings as the mechanical fastener. 22 gauge mill galvanized steel - 7/8" x 7". Threaded Inserts - Plastic inserts are included in very large castings such as large moldings, columns and stackable column components. These are for mechanical ties and not for lifting purposes. Adhesives - Latex - modified mortar or equivalent used on a stable substrate in conjunction with the mechanical fastener should be used. White cement can be used to adjust the greenish color created by using the latex mortar. Premium grade construction adhesives which come in tubes should be used for bonding columns and on flat surfaces where latex mortar cannot be used.

CONCRETE MATERIALS Portland Cement: Type I Portland Cement Gray or Lehigh White Use only one brand, type and source of supply of cement throughout the project, unless otherwise acceptable to Architect Coarse/Fine Aggregate - Sand and Gravel: Hard, durable, selected and graded; free of material that causes staining or reacting with cement.

Pigments: Nonfading, resistant to lime and other alkalies. Water: Drinkable, free from foreign materials in amounts harmful to concrete and embedded steel. Air-Entraining Admixture: Utilize standard mix designs incorporating admixtures which facilitate the workability, curing and strength of the mix.

Compressive Strength: 3500-5000 psi minimum at 28 days.

General: Fabricate precast concrete units complying with manufacturing and testing procedures, quality control recommendations, and following dimensional tolerances, unless otherwise indicated. Molds: Accurately construct molds mortar-tight and of sufficient strength to withstand pressures due to concrete placing operations and temperature changes. Maintain mold work to provide completed precast concrete units of shapes, lines and dimensions indicated, within specified fabrication tolerances. Dimensional Tolerances of Finished Units: Ornamental architectural precast concrete, being tapered by design, is measured for length, width and thickness at the surface from which the mold is loaded maintaining plus or minus 1/16 of an inch tolerance. Overall height and width measured at face adjacent to

Surface Finish: Fabricate precast units and provide exposed surface finished as follows: Traditional -smooth, relatively void free texture Modern - Less voids than traditional but not typically void free. Champagne - Lightly etched texture Sonoran - Heavily etched texture exposing more aggregate

Color: Select from CDI color chart to minimize variations in color.

Antique - High irregular, rusticated finish.

PART 3 - RECOMMENDED EXECUTION OF THE INSTALLATION The successful installation requires experienced, knowledgeable installers in order to achieve a quality installation. Local building codes should be followed. Considerations for installation include: Install precast concrete members plumb, level and in alignment. Provide temporary supports and bracing as required to maintain position, stability and alignment as members are being permanently

Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses.

Anchor units in final position by bolting, welding, grouting, or as otherwise indicated. Remove temporary shims, wedges and spacers as soon as possible after anchoring and grouting are completed. Cleaning: Clean exposed facings to remove dirt and stains on units after erection and completion of joint treatments. Protect other work from damage due to cleaning operations. Do not use cleaning materials or processes that could change the character of exposed concrete finishes.

Precast must be installed on a sound substrate with adequate adhesive applied to the bonding surface of each casting. Many substrates are suitable for application of CDI products provided they are clean and strong enough to support the weight of the castings. Fasteners, such as corrugated wall ties or threaded inserts, are included with most CDI products and should be used in conjunction with adhesives. In addition to the fasteners, an adhesive should be used to bind the castings to substrate and to each other. Latex-modified mortar produces a strong, permanent bond, and the setting bed formed by the mortar allows for the adjustments needed for satisfying alignment. A recommended latex mortar

adhesive is Custom Crete (Custom Building Product, 1-800-272-8786). Premium-grade construction adhesives, packaged in tubes and applied with caulking guns, are recommended for bonding column halves and flat surfaces. Sikaflex-la (Sika Corporation 1-800-933-7452) is widely available.

Columns are manufactured and shipped in halves; they are usually installed around structural supports Threaded inserts are cast into the columns and are used to mechanically attach the columns to the supports. The inserts should never be used to lift the columns. In Addition to the inserts, Adhesive (such as Sikaflex-la) should be used to bond the two column haves. Nylon strap slings should be used to move the columns into place and to fold them together while the adhesive cures. Care should be taken to avoid marring the surface of the columns. Solid grouting of the column cavities generally is not recommended as it can complicate the installation,

When selecting columns for applications which require structural supports, carefully view the cavity dimension to determine if the supports will fit. The method chosen to install columns should conform to the local building codes and safe, reliable construction practices. Part 5 - CLEAN UP AND SEALING

particularly if wood supports are used. The moisture in the grout tends to cause the wood to swell and

Precast concrete should be cleaned with masonry cleaners available from masonry specialty suppliers. At no time should acid be used. The precast concrete should be treated as other concrete, depending on your local weather conditions. Sealer information is available from masonry product manufacturers. We suggest testing

DIVISION 4 - MASONRY:

04220 Concrete:

Unit Masonry Concrete unit masonry shall be as shown on the drawings prepared by the Structural

04430 Stone Veneer

Supply and install stone veneer as shown on the drawings. Erect field samples as instructed by Owner. Installation of veneer as wall covering, shall comply with the applicable provisions set forth of section

DIVISION 5 - METALS

05120 Structural Steel

Primer: Lead-free red metal primer, zinc chromate or alkyd type

Supply and install structural steel as shown and specified on drawings. Conform to additional requirements of the structural drawings and to applicable positions of American Institute of Steel Construction (AISC), Chicago, IL, codes and manuals of American Welding Society (AWS), California Administrative Code (CAC), and all governing codes. Submit shop drawlings fully detailing work of this section, including accessories, welding, connections, including minor connections not shown but necessary for complete installation.

Product shall be as follows:

Steel shapes: ASTM A36 Steel tubing: ASTM A36, A500 or A501 Steel pipe: ASTM Al20 Schedule 40 for general use, ASTM A53 Grade B for structural use. Aluminum: ASTM B209, B221, and B429, Alloy 6063-T5. Stainless Steel: ASTM AI76, Type 302 or 304, with No. 4 satin finish unless otherwise shown. Bolts & Nuts: ASTM A307

Welding: Conform to ASW DI.I, as modified by referenced AISC Standards, and as noted on Drawings Weld joints by shielded electric-arc methods indicated or to contact with smooth surfaces, free of holes, slag. Grind exposed welds subject or other defects, flush with adjoining for concealed welds. Shop Priming: Clean surfaces according to AISC Specifications. Apply shop coat of metal primer to

minimum 1.0 mil dry film thickness. Work primer into joints. Do not prime galvanized items or items imbedded in concrete or masonry. Shop prime all ferrous items not to be galvanized unless otherwise Miscellaneous Items: Fabricate items not specifically mentioned according to the Drawings, approved Shop Drawings, and as required to complete the entire work. Galvanize exterior items and shop prime

interior items unless otherwise shown or specified. Grouting: Provide non-shrink grouting for work of this section as shown and required. Conform to manufacturer's directions.

Galvanizing Repair: Wire brush welds and damaged coating to clean bright metal. Apply one coat of

not-applied galvanizing repair compound where surfaces remain exposed and unpainted.

galvanizing repair paint where surfaces are concealed or are to be finish painted. Use the specified

Shop Prime Coat Repair: Clean field welds, field bolts, and all damaged shop primer and spot coat of the same primer used for the shop coat. Apply a spot coat of the same primer used for the shop coat.

Fasteners: Provide fasteners and connectors of approved types as required for the Installations, whether or not indicated. Provide galvanized fasteners for galvanized items items and for exterior use. Installation shall conform to drawings, approved submittals and requirements herein. Obtain necessary templates and information to provide all holes and drilling indicated or required for fasteners. Protect aluminum from contact with dissimilar metals and with concrete or cement plaster by painting the contact surfaces of each with two heavy coats of bituminous paint, or suitable isolation gaskets, as applicable for each condition.

05500 Metal Fabrications

Supply and install miscellaneous metal fabrications as shown and detailed on the drawings. DIVISION 6 - WOOD AND PLASTIC

06100 Rough Carpentry:

Supply and install rough framing as shown on the structural drawings.

Coordinate all work with the work of other trades. Provide chases, cuts, bracing, and blocking, required by other trades

Provide fire blocking at floor, ceiling, coves and mid-height of walls over 10'-0" in height. Floor sheathing shall be screwed and glued to floor joists. Existing and new floors where applicable

All wood within 6" of earth or 1" of concrete shall be redwood or pressure treated.

Product shall be as follows:

Sawn Lumber: Shall be Douglas fir, 545, and shall bear a grade mark. Use grades as specified for stressed applications and "economy" grade for blocking, bridging and other non-stressed conditions. Use preservative treated lumber in contact with concrete or masonry.

Sheathing: Shall be plywood or oriented strand board rated by the American Plywood Association (APA), in grades and thickness' as indicated on the structural drawings. Plywood shall conform to product standard U.S. PS I, current edition. Sheathing which is to be covered with elastomeric deck topping must be plywood.

Hardboard: Shall be Masonite as manufactured by Masonite Corp. Installation shall conform to the written specifications of the manufacturer and to the recommendations of American Hardboard

Nails: Common wire nails, sizes as indicated. Ring-shank nails for plywood on floors. Bolts and Nuts: ASTM A307 galvanized for exterior exposed use. Provide matching washers.

Framing Connectors: Shall be as manufactured by Simpson Strong Tie Company Inc. Alternates may be used only with prior approval of the Architect.

Contractor shall coordinate soffit framing with the plan to allow adequate space for installation of light fixtures and mechanical equipment.

bracing, temporary supports, and materials not shown or specified but necessary for a complete job. 06180 Structural Glued-Laminated Timber

Installation shall be as shown and specified on the structural drawings, complete with connectors, nailing,

Supply and install glued-laminated timber as shown on the structural drawings. Provide a certificate of conformance for each timber if required by the Building Official. Deliver, store and handle ued-laminated timbers in conformance with the manufacturers written instructions. Installation shall be as shown on the structural drawinas.

Product shall conform to ANSI Standards. Each timber shall be identified with an inspection mark from either the American Plywood Association - Engineered Wood Systems (APA-EWS), or from the American Institute of Timber Construction (AITC).

06190 Wood Trusses

manufacturers written installation instructions.

Supply and install wood roof trusses as shown on the structural drawings. Deliver, store and handle trusses in conformance with the manufacturer's written instructions.

Submit shop drawings and engineering calculations to the Architect and Structural Engineer for review and approval prior to fabrication. The calculations shall be stamped and signed by an engineer registered in the state in which the project is being built. The truss manufacturer shall provide shop drawings and calculations, as reviewed and approved by the Structural Engineer, to the building Official prior to fabrication of the trusses or, if required by the Building Official, prior to the issuance of a

06195 Manufactured Lumber Supply and install manufactured joists, beams, and headers as shown on the framing drawings.

Product shall be manufactured by the bear and trademark of, with quality control inspections. No

Installation shall be as shown on the truss manufacturer's shop drawings and in conformance with the

substitution of product is allowable unless permitted in writing by the Structural Engineer.

Installation shall be in accordance with the Residential Products Reference Guide published by Trus Joist

MacMillan. Spans are not to exceed Trus Joist recommended spans based on L/480 live load

06200 Finish Carpentry Supply and install all interior wood trim, door frames, casings, shelves, poles and plastic work as shown on the drawings and as directed by the Owner. Field measure for fabricated items prior to fabrication.

Product and finish shall be as selected by the Owner. Provide solid blocking of all cabinets, countertops, mirrors, shelving, light fixtures, and all miscellaneous wall and ceiling mounted or recessed items.

All interior exposed ceiling joists, beams or trim shall be finish grade. Finish treatment shall be confirmed with the Owner or Architect. Distressed treatments shall be confirmed with the Architect. Installation shall be true to line and level, fastened securely and scribed to prior finish work for a tigh fit. Provide one shelf (IXI2), mounted at six feet above the floor and one rod (I-I/2" diameter), mounted at five feet - six inches above the floor and 10-1/2" from the face of the rear wall at each clothes

closet, whether or not such shelving and rod are shown on the drawings. Verify the requirement for closet layout with the Owner. Confirm with the Architect the Owners desire for pole and shelf, or

Owners Consultants closet design. 06430 Stair Work And Handrails

Stair builder shall provide shop drawings to be approved by Architect. Supply, install stair parts and handrails as shown and detailed on the shop drawings. Product and finish shall be as selected by the

Owner. Installation shall be true to line and level, fastened securely and scribed to prior finish work for

DIVISION 7 - THERMAL AND MOISTURE

7115 Sheet Waterproofing

section to couple with TREMDrain, TREMDrain 1000, and TREMDrain 2000.

these conditions have been corrected in a manner acceptable to installer.

Below Grade Vertical Waterproofing:

TREMCO TREMDrain total-drain 🛊 drainage material, a two part, prefabricated drain consisting of a formed core covered on one side with a non-woven needle-punched polypropylene filter fabric. This system provides both water collection plus a high profile section for water flow around the perimeter o the structure. TREMDrain Total-Drain consists of a 12" high profile drainage section with a 12" transition

Provide adhesive compounds and tapes recommended by waterproofing sheet manufacturer for flashing. Provide protection course Amocor board or equal or as recommended by waterproofing sheet

Installer must examine substrate and notify contractor of unsatisfactory conditions. Do not proceed until

required procedures for protection of completed membrane during installations of work over membrane.

In placing testing: Before completed membranes on horizontal surfaces are covered by protection course or other work, test for leaks with 2" depth of water maintained for 24 hours. Repairing leaks revealed by examination of substructure and repeat test until no leakage is observed. Institute all

07190 Weather-Resistive Barrier

Supply and install weather-resistive barrier to all weather-exposed surfaces to fully protect the structure from water intrusion as required by CBC. The weather - resistive barrier shall consist of building paper, penetration flashing at all wall openings and waterproof membrane as shown on the drawings and details and as specified below.

Product shall be as follows:

Building paper: Shall be breather type asphalt saturated Grade D sheathing paper meeting or exceeding federal specifications.

conforming to federal specifications. Waterproof membrane: On landscape walls, Yulkem 201 and Yulkem 222 are high solids VOC compliant modified polyurethane waterproofing membranes. Vulkem 201 is a one-component moisture curing elastomer. Vulkem 222 is a two component chemically curing elastomer. Vulkem 201 and Vulkem 222

are formulated from the same high-quality polymer, are available in four viscosities (L, H, R, and T)

suitable for applications to horizontal and vertical surfaces, and conform to the requirements of ASTM C

Penetration flashing: Shall be I2" wide heavy-duty reinforced kraft between black polyethylene layers

Shall be a minimum 40 mil. Thick rubberized asphalt sheet membrane.

Deck membrane: Vulkem 201 and Vulkem 222 are high solids VOC compliant modified polyurethane waterproofing membranes. Vulkem 201 is a one-component moisture curing elastomer. Vulkem 222 is a two component chemically curing elastomer. Vulkem 201 and Vulkem 222 are formulated from the same high-quality polymer, are available in four viscosities (L, H, R, and T) suitable for applications to horizontal and vertical surfaces, and conform to the requirements of ASTM C 836-89a.

Installation shall be as follows:

Building paper: Shall be installed in weatherboard fashion lapped not less than 2 inches at horizontal joints and not less than 2 stud bays at vertical joints. Attach paper to building only at solid backing (studs or sheathing). Repair all cuts and tears to maintain water protection of the structure. Building paper installed over wood base sheathing below exterior lath and plaster shall be two layers of Grade

Penetration flashing: Shall be installed as detailed.

Waterproof membrane: Shall be installed in accordance with manufacturer's installation instructions using primer from same manufacturer, as required.

07210 Thermal Building Insulation

Contractor shall install insulation per sht T-24 or as follows:

New 2x4 walls: R-13 - Batt New 2x6 and 2x8 walls: R-19 - Batt Interior walls: R-13 - Batt All plumbing walls: R-19 - Batt New 2x10 or deeper walls: R-30 - Batt Existing 2x walls: Blown Wool New and existing ceilings: R-30 - Batt New and existing floors: R-30 - Batt New and existing hot water pipes: R-4 Neoprene Water Heaters and Hot Water Storage Tanks: R-12 HVAC Ducts in unconditioned spaces: R-4.2

Supply and install thermal building insulation in the opaque portions of all roof/ceiling assemblies, framed walls and all floors that separate conditioned and unconditioned spaces. Insulation shall also be installed in the walls, ceiling, and floors of new and existing portions of bedrooms, bathrooms, and laundry or

For R-30 rigid insulation use Pyrox 4.0" =30.2 R ICBO #3240 Batt type insulation shall comply with the California Quality Standards for Insulating Materials. The

adopted by the California Energy Commission.

Installation shall be in accordance with the manufacturer's written installation instructions. 07310 Roof Tiles

installer shall post a signed certificate indicating compliance with the Energy Efficiency Standards

Supply and install roof tile as indicated on the drawings. Install per manufacturer's recommendations

07600 Flashing

Supply and install copper flashing, gutters, downsports, scuppers as indicated on the drawings or as directed by the Owner, including miscellaneous items required for a completely water tight job.

No surface contact shall be accepted. Roofing shall be installed in accordance with manufacturer's specific installation procedures. Provide all required sheet metal flashing and caulking. Contractor shall provide 40-year minimum warranty.

Contractor shall avoid installing copper flashing in contact with metal or aluminum. Where contact is

anticipated, the Contractor shall notify the Architect and install a layer of jiffyseal of 15# felt between.

07710 Prefabricated Roof Specialties

All exposed metal flashing shall be painted to match adjacent surfaces.

Supply and install roof vents as indicated on the drawings.

Product shall be manufactured by Harlen Metal products, Inc. or approved equal. Roof vents of alternate manufacturers must provide a minimum of .94 square feet of free vent area each, unless additional vents are installed to provide equivalent total vent area.

Installation shall conform to the written instructions of the manufacturer and shall be coordinated with

the work of the roofing installer. Provide curbs, flashings, fasteners, and accessories necessary for a

Lace all tile in valleys.

Use copper flashing throughout.

Mortar set all ridge & hip tiles.

Use #40 organic tile liner underlayment.

Use torch down roofing at all horizontal surfaces.

Cricket all flat roof to vertical wall joints with copper flashing over solid wood cart.

Install copper dome attic vents as required not visible from street or entry.

Group all attic pipes and vents to not be visible from street or entry

07970 Joint Sealants

Supply and install sealants with backer rods, to provide a watertight installation. Conform to the

recommendations of the manufacturer. Colors shall match adjacent surfaces unless otherwise directed

bu the Architect.

Product shall be as follows:

silicone for joints in vertical surfaces.

Sealant materials: One-part self-leveling polyurethane for joints in horizontal surfaces; One-part

Backers: Inert fibrous glass, polyethylene or polyurethane as acceptable to sealant manufacturer. Installation shall be in accordance with the manufacturer's written installation instructions. Mask surfaces not to be sealed. Apply sealant manufacturer's recommended primer.

Maximum 3/8" sealant depth unless otherwise shown. Minimum joint width is 1/8" for metal to metal joints and 1/2" maximum width elsewhere. Apply sealant under sufficient pressure to fill voids. Finish exposed joints smooth and flush with adjoining surface unless recessed joints are shown. Remove temporary maskina as soon as ioint is completed. Clean material from surfaces not to receive sealant and restore the finish as required. If surfaces

adjoining joints are stained and cleaning is not acceptable to the Owner, remove the affected work and provide new finish materials as directed and approved, at not extra cost to the Owner. Seal penetrations through fire-rated assemblies using 3-M Fire-Barrier manufactures by 3-M Company Inc., installed to the specifications and recommendations of the manufacturer.

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REVISIONS: SUBMITTAL DATE:

> CONSTRUCTION DOCUMENTS PROJECT NUMBER:

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MDL

SPECIFICATIONS